

IN THE CLAIMS

1. (Currently amended) Data communication means for communicating N-bit data, N being an integer with a value of at least three, ~~the data communication means having a plurality of substantially parallel conductors comprising:~~

_____ a first conductor for communicating a first bit of the N-bit data,
_____ a second conductor for communicating a second bit of the N-bit data, and
_____ a third conductor for communicating a third bit of the N-bit data,
wherein the first, second and third conductors are parallel to one another,
respectively communicating a first, a second and a third bit of the N-bit data, the first
conductor having a first distance to the second conductor, and the second conductor
having a second distance to the third conductor, the first distance being smaller than the
second distance;

_____ characterized wherein that the a first distance from the first conductor to
the second conductor is based on a first correlation between the first bit and the second
bit, and

_____ wherein the a second distance from the second conductor to the third
conductor is larger than the first distance and is based on a second correlation between
the second bit and the third bit.

2. (Original) Data communication means as claimed in claim 1, characterized in that the first bit is a bit of a data word and the second bit is an encoding bit of a fault-tolerant encoding method for the data word.

3. (Original) Data communication means as claimed in claim 2, characterized in that the fault-tolerant encoding method is dual-rail encoding.

4. (Previously presented) Data communication means as claimed in claim 1, characterized in that the data communication means further comprise a fourth conductor for communicating a fourth bit of the N-bit data word, the fourth conductor having a third distance to the third conductor based on a third correlation between the third bit and the

fourth bit.

5. (Canceled)

6. (Original) Method for designing data communication means for communicating N-bit data, N being an integer with a value of at least three, the data communication means having a plurality of substantially parallel conductors comprising a first, a second and a third conductor for respectively communicating a first, a second and a third bit of the N-bit data, the first conductor having a first distance to the second conductor, and the second conductor having a second distance to the third conductor, the first distance being smaller than the second distance;

characterized in that the method comprising the steps of:
calculating a first correlation between the first bit and the second bit;
calculating a second correlation between the second bit and the third bit;
determining the first distance based on the first correlation; and
determining the second distance based on the second correlation.

7. (Original) A method as claimed in claim 6, characterized by further comprising the step of constructing a codebook of the N-bit data for calculating the first correlation and the second correlation.

8. (Original) A method as claimed in claim 7, characterized in that the first bit is a bit of a data word and the second bit is an encoding bit of a fault-tolerant encoding method for the data word.

9. (Currently amended) A method as claimed in claim 7, characterized by further comprising the step of changing an order of the first conductor, the second conductor and the third conductor to increase a sum of the first correlation and the second correlation.